UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/035,995	03/06/1998	TAKESHI SAITO	0039-6551-3R	5430

22850 7590 10/03/2005	EXAMINER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314	WILLETT, STEPHAN F

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/035,995	SAITO ET AL.
	Examiner	Art Unit
	Stephan F. Willett	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _11 July 2005_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _96-106_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _96-106_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 96, 106 are objected to because of the following informalities: The "contents

data" is unclear. Appropriate correction is required.

Drawing Objections

2.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every

feature of the invention specified in the claims. Therefore, the features in claims 96-106 must be

shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3.   Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement drawing

sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Specification Objections

4.   The Content of Specification requires:

(g)   Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or
        general statement of the invention as set forth in 37 CFR 1.73. The summary is
        separate and distinct from the abstract and is directed toward the invention rather
        than the disclosure as a whole. The summary may point out the advantages of the
        invention or how it solves problems previously existent in the prior art (and
        preferably indicated in the Background of the Invention). In chemical cases it
        should point out in general terms the utility of the invention. If possible, the
        nature and gist of the invention or the inventive concept should be set forth.
        Objects of the invention should be treated briefly and only to the extent that they
        contribute to an understanding of the invention.

Thus, a summary directed to the claimed invention is required.

Claim Rejections - 35 USC 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and
> distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 96, 101-103, 106 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The "transmitting terminal" and the "receiving terminal" in

the last two paragraphs of claims 96 and 106 and as used elsewhere are unclear since it is not

clear on which network these terminals reside since they con not be on both networks. Also, in

paragraphs 5 and 6 state "on the first network" and "on the second network", but it is unclear all

of what components are on the said networks.

Claim Rejections - 35 USC 103

1.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103□

and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
> in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

2.   Claims 96-98, 102, 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Choi et al. with Patent Number 5,734,824 in view of Wehrend with Patent Number 6,614,782.

3.   Regarding claim(s) 96, 106, Choi teaches discovering networks' topologies. Choi

teaches a first collection unit as the assigned NMM, col. 9, lines 23-25 configured to collect

address and attribute information, col. 10, lines 62-63 and 53-56 of terminals connected to first

network as LAN1 44 in Figure 4 which inquires as to the address. Choi teaches a second

collection unit as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address and

attribute information, col. 10, lines 62-63 and 53-56 of terminals connected to a second network

as LAN2 40 in Figure 4 which as inquires as to the address. Choi teaches a memory unit

configured to store the address and attribute information of each terminal device on the first

network and the second network collected by the first collection unit and the second collection

unit database updates, col. 10, lines 64-66. Choi teaches a display control unit configured to

enable display of information stored in the memory unit, col. 14, lines 17-20. Choi teaches the

invention in the above claim(s) except for explicitly teaching first and second set up units to set

up connections on the two networks and to receive and transmit content data. In that Choi

operates to generate topology data, the artisan would have looked to the network arts for details

of implementing a connection after topology determination. In that art, Wehrend, a related

network communication system, teaches "data packets DP that are to be exchanged within local

network LAN1 ... LAN4", col. 12, lines 41-42 in order to provide content data transmission.

Wehrend specifically teaches a first set up unit configured to set up a connection for transmitting

content data to be transmitted from a transmitting terminal to a receiving terminal on the first

network, col. 13, lines 18-20, upon receiving a request for transmission of the content data

possessed by the transmitting terminal from a terminal selected as the transmitting terminal to a

terminal device on the second network selected as the receiving terminal, col. 13, lines 7-8.

Wehrend specifically teaches a second set up unit configured to set up a channel for transmitting

content data to be transmitted from a transmitting terminal on the second network, col. 13, lines

21-22. Wehrend specifically teaches a reception unit configured to receive the content data

transmitted from the transmitting terminal using the connection assumingly from the first

network, col. 13, lines 9-11. Wehrend specifically teaches a transmission unit configured to

transmit the content data received by the reception unit to the receiving terminal using the

connection assumingly of the second network, col. 13, lines 34-37. Further, Wehrend suggests

"means are provided for the connection setup", col. 5, lines 30-31 will result from implementing

his connections to transmit content data. The motivation to incorporate a connection insures that

the network resources can be used. Thus, it would have been obvious to one of ordinary skill in

the art to incorporate the data transmission connection as taught in Wehrend into the network

topology determination system described in the Choi patent because Choi operates with network

communications and Wehrend suggests that optimization can be obtained by setting up network

communication. Therefore, by the above rational, the above claim(s) are rejected.

5.   Regarding claim(s) 97, Choi teaches a display unit configured to enable display of

information stored in the memory unit, col. 14, lines 17-20. Therefore, by the above rational, the

above claim(s) are rejected.

6.   Regarding claim 98, the Choi and Wehrend patents disclose the method of the preceding

claims. The Choi and Wehrend patents do not explicitly disclose a decoding unit configured to

decode content data received by the reception unit, wherein the transmission unit transmits the

content data decoded by the decoding unit to the receiving terminal by using the channel.

However, Official Notice is taken MPEP 2144.03 (a)) that decoding received data is well known

in the art to insure data is understood. It would have been obvious to one of ordinary skill in the

art at the time of the application's invention to decode data to obtain the advantages of

communicating with coded data. Therefore, by the above rational, the above claim(s) are

rejected.

7.   Regarding claim(s) 102, Choi teaches discovering networks' topologies. Choi teaches a

first collection unit as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address

and attribute information, col. 10, lines 62-63 and 53-56 of terminals connected to first network

as LAN1 44 in Figure 4 which inquires as to the address. Choi teaches a second collection unit

as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address and attribute

information, col. 10, lines 62-63 and 53-56 of terminals connected to a second network as LAN2

40 in Figure 4 which as inquires as to the address. Choi teaches a memory unit configured to

store the address and attribute information of each terminal device on the first network and the

second network collected by the first collection unit and the second collection unit database

updates, col. 10, lines 64-66. Choi teaches a display unit configured to enable display of

information stored in the memory unit, col. 14, lines 17-20. Choi teaches the invention in the

above claim(s) except for explicitly teaching the request for transmission of the contents data

possessed by the transmitting terminal is made by a request message containing information for

identifying the transmitting terminal such that the transmission of the contents data is

commanded to the transmitting terminal identified by the information. In that Choi operates to

generate topology data, the artisan would have looked to the network arts for details of

implementing a connection with a ID after topology determination. In that art, Wehrend, a

related network communication system, teaches "data packets DP that are to be exchanged

within local network LAN1 ... LAN4", col. 12, lines 41-42 in order to provide content data

transmission. Wehrend specifically teaches requesting transmission of data with terminal ID,

col. 3, lines 7-10. Further, Wehrend suggests "means are provided for the connection setup",

col. 5, lines 30-31 will result from implementing his connections to transmit content data. The

motivation to incorporate terminal ID and transmission insures that the network resources can be used. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the terminal ID and transmission as taught in Wehrend into the network topology determination system described in the Choi patent because Choi operates with network communications and Wehrend suggests that optimization can be obtained by a terminal ID and transmission. Therefore, by the above rational, the above claim(s) are rejected.

4.   Claims 99-100, 103-105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. with Patent Number 5,734,824 in view of Wehrend with Patent Number 6,614,782 and in view Hatae with Patent Number 6,332,159.

8.   Regarding claim(s) 99-100, 103-104, Choi teaches discovering networks' topologies. Choi teaches a first collection unit as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address and attribute information, col. 10, lines 62-63 and 53-56 of terminals connected to first network as LAN1 44 in Figure 4 which inquires as to the address. Choi teaches a second collection unit as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address and attribute information, col. 10, lines 62-63 and 53-56 of terminals connected to a second network as LAN2 40 in Figure 4 which as inquires as to the address. Choi teaches a memory unit configured to store the address and attribute information of each terminal device on the first network and the second network collected by the first collection unit and the second collection unit database updates, col. 10, lines 64-66. Choi teaches a display control unit configured to enable display of information stored in the memory unit, col. 14, lines 17-20. Choi teaches the invention in the above claim(s) except for explicitly teaching first and second set up units to set up connections on the two networks and to receive and transmit content data. In that Choi

operates to generate topology data, the artisan would have looked to the network arts for details

of implementing a connection after topology determination. In that art, Wehrend, a related

network communication system, teaches "data packets DP that are to be exchanged within local

network LAN1 ... LAN4", col. 12, lines 41-42 in order to provide content data transmission.

Wehrend specifically teaches a first set up unit configured to set up a connection for transmitting

content data to be transmitted from a transmitting terminal to a receiving terminal on the first

network, col. 13, lines 18-20, upon receiving a request for transmission of the content data

possessed by the transmitting terminal from a terminal selected as the transmitting terminal to a

terminal device on the second network selected as the receiving terminal, col. 13, lines 7-8.

Wehrend specifically teaches a second set up unit configured to set up a channel for transmitting

content data to be transmitted from a transmitting terminal on the second network, col. 13, lines

21-22. Wehrend specifically teaches a reception unit configured to receive the content data

transmitted from the transmitting terminal using the connection assumingly from the first

network, col. 13, lines 9-11. Wehrend specifically teaches a transmission unit configured to

transmit the content data received by the reception unit to the receiving terminal using the

connection assumingly of the second network, col. 13, lines 34-37. Further, Wehrend suggests

"means are provided for the connection setup", col. 5, lines 30-31 will result from implementing

his connections to transmit content data. The motivation to incorporate a connection insures that

the network resources can be used. Thus, it would have been obvious to one of ordinary skill in

the art to incorporate the data transmission connection as taught in Wehrend into the network

topology determination system described in the Choi patent because Choi operates with network

communications and Wehrend suggests that optimization can be obtained by setting up network

communication.. The Choi and Wehrend patents teach the invention in the above claim(s) except

for explicitly teaching the first and second networks constitute an IEEE 1394 bus, and the

channel is an IEEE 1394 isochronous transfer channel and IEEE 1394 connection based bridges.

In that the Choi and Wehrend patents operate to generate topology connection data, the artisan

would have looked to the network arts for details of implementing IEEE 1394 networks

connection after topology determination. In that art, Hatae, a related network communication

system, teaches "among the technologies employable is such communication system, there is

already known the IEEE 1394 standard", col. 1, lines 22-24 in order to provide content data

transmission. Hatae specifically teaches " a bus system ... equipped with 1394 interfaces", col.

6, lines 59-62, the channel is IEEE 1394 isochronous transfer channel, col. 18, lines 18-24 and

the networks are formed by a bridge of a plurality of IEEE 1394 buses, col. 22, lines 8-10.

Further, Hatae suggests "upon detecting a change in the configuration (topology), the 1394

interface" col. 2, lines 3-4 will result when implementing his connections to transmit content

data. The motivation to incorporate IEEE 1394 buses, isochronous channels and bridges insures

that the network resources use the IEEE 1394 standard. Thus, it would have been obvious to one

of ordinary skill in the art to incorporate IEEE 1394 buses, isochronous channels and bridges as

taught in Hatae into the network topology determination system described in the Choi and

Wehrend patents because Choi and Wehrend operate with network communications and Hatae

suggests that optimization can be obtained by using the IEEE 1394 standard. Therefore, by the

above rational, the above claim(s) are rejected.

5.   Claim 101 is rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. with

Patent Number 5,734,824 in view of Wehrend with Patent Number 6,614,782 and in view Ise

with Patent Number 6,643,258.

9.   Regarding claim(s) 101, Choi teaches discovering networks' topologies. Choi teaches a

first collection unit as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address

and attribute information, col. 10, lines 62-63 and 53-56 of terminals connected to first network

as LAN1 44 in Figure 4 which inquires as to the address. Choi teaches a second collection unit

as the assigned NMM bridge, col. 9, lines 23-25 configured to collect address and attribute

information, col. 10, lines 62-63 and 53-56 of terminals connected to a second network as LAN2

40 in Figure 4 which as inquires as to the address. Choi teaches a memory unit configured to

store the address and attribute information of each terminal device on the first network and the

second network collected by the first collection unit and the second collection unit database

updates, col. 10, lines 64-66. Choi teaches a display control unit configured to enable display of

information stored in the memory unit, col. 14, lines 17-20. Choi teaches the invention in the

above claim(s) except for explicitly teaching first and second set up units to set up connections

on the two networks and to receive and transmit content data.   In that Choi operates to generate

topology data, the artisan would have looked to the network arts for details of implementing a

connection after topology determination. In that art, Wehrend, a related network communication

system, teaches "data packets DP that are to be exchanged within local network LAN1 ...

LAN4", col. 12, lines 41-42 in order to provide content data transmission. Wehrend specifically

teaches a first set up unit configured to set up a connection for transmitting content data to be

transmitted from a transmitting terminal to a receiving terminal on the first network, col. 13,

lines 18-20, upon receiving a request for transmission of the content data possessed by the

transmitting terminal from a terminal selected as the transmitting terminal to a terminal device on

the second network selected as the receiving terminal, col. 13, lines 7-8. Wehrend specifically

teaches a second set up unit configured to set up a channel for transmitting content data to be

transmitted from a transmitting terminal on the second network, col. 13, lines 21-22. Wehrend

specifically teaches a reception unit configured to receive the content data transmitted from the

transmitting terminal using the connection assumingly from the first network, col. 13, lines 9-11.

Wehrend specifically teaches a transmission unit configured to transmit the content data received

by the reception unit to the receiving terminal using the connection assumingly of the second

network, col. 13, lines 34-37. Further, Wehrend suggests "means are provided for the

connection setup", col. 5, lines 30-31 will result from implementing his connections to transmit

content data. The motivation to incorporate a connection insures that the network resources can

be used. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the

data transmission connection as taught in Wehrend into the network topology determination

system described in the Choi patent because Choi operates with network communications and

Wehrend suggests that optimization can be obtained by setting up network communication. The

Choi and Wehrend patents teach the invention in the above claim(s) except for explicitly

teaching a command unit configured to command the transmitting terminal to transmit the

contents data by using the connection and command the receiving terminal to receive content

data, when the channel is set up on the second network by the second setup unit according to a

control message received by the relay device, the control message containing at least information

regarding a required amount of communication resources at a time of transmitting the contents

data on the second network and a header information to be attached to the contents data, in order

to set up the channel on the second network. In that the Choi and Wehrend patents operate to

generate topology connection data, the artisan would have looked to the network arts for details

of implementing bandwidth allocation in networks in a connection after topology determination.

In that art, Ise, a related network communication system, teaches "the information indicating a

high priority level into a header", col. 9, lines 4-5 in order to provide the requested resources. Ise

specifically teaches "a request according to a requested amount communication resources", col.

26, lines 40-46. Further, Ise suggests "receiving a request for allocation of communication

resources", col. 22, lines 40-41 will result when implementing his bandwidth allocation. The

motivation bandwidth requests and allocation insures that the network resources used efficiently.

Thus, it would have been obvious to one of ordinary skill in the art to incorporate bandwidth

requestsas taught in Ise into the network topology determination system described in the Choi

and Wehrend patents because Choi and Wehrend operate with network communications and Ise

suggests that optimization can be obtained by using bandwidth allocation. Therefore, by the

above rational, the above claim(s) are rejected.

10.   Regarding claims 101 the Choi and Wehrend and patents disclose the method of the

preceding claims. The Choi and Wehrend patents do not explicitly disclose a command unit

configured to command the transmitting terminal to transmit the contents data by using the

connection and command the receiving terminal to receive content data, when the channel is set

up on the second network by the second setup unit according to a control message received by

the relay device, the control message containing at least information regarding a required amount

of communication resources at a time of transmitting the contents data on the second network

and a header information to be attached to the contents data, in order to set up the channel on the

second network. However, Official Notice is taken MPEP 2144.03 (a)) that commanding to

transmit data with a control message containing the required amount of communication resources and header information is well known in the art to insure data coordinated when set. It would have been obvious to one of ordinary skill in the art at the time of the application's invention to command to transmit data with a control message containing the required amount of communication resources and header information to obtain the advantages of communicating in an organized manner. Therefore, by the above rational, the above claim(s) are rejected.

Response to Amendment

1.   Based on the new grounds for rejection the applicants arguments are moot.

Conclusion

2.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the references is suggested. The other references cited teach numerous other ways to determine the topology of networks and to transmit data between devises on different networks, thus a close review of them is suggested.

2.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (571)272-3890. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

3.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

1.   Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (571)272-2100.

sfw

September 30, 2005

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER